The Irwin Auger Bit Company

Wilmington, Ohio

Manufacturers of

Irwin Auger Bits

The trademark to the right is stamped on the shank of every Irwin made bit. It is the mark of the originator and sole manufacturer of the genuine Irwin bit. The red and green tag attached to every Irwin bit shows on one side the name and stock number of the bit and describes the use. The reverse side of the tag carries our guarantee of the measure of service which the bit will deliver, and states that we stand behind your dealer.

The IRWIN Bit
Reg. U.S. Pat. Off.

The auger bit recommended for school shops is the Smoothbor Auger Bit No. 62-TS. This bit is particularly recommended for patternmakers and cabinetmakers, and for all such uses as an auger bit is called upon to perform in the average school woodworking shop.

LENGTH—Usual Auger Bit (see table).

CUTTING HEAD—Smoothbor (see drawing).

(1) Screw with fine pitch of thread for extra smooth boring.
(2) Spurs of length in keeping with pitch of screw.
(3) Cutters designed for cutting smooth thin chips.
(4) Throat opened for easy flow of chips.

SHANK—Tapered square to fit standard brace chuck.

FINISH—Polished.

PACKED—Sizes 4/16" to 16/16" inclusive, six in box. Also packed in a set.

Specifications

Sizes in 16th of an inch	Sizes in Fractions of an inch	Average Length of Twist in Inches	Average Length Over all in Inches
4	1/4	4	7 1/2
5	5/16	4 1/2	7 5/8
6	3/8	4 1/2	7 3/4
7	7/16	4 1/2	7 7/8
8	1/2	4 1/2	8
9	9/16	4 1/2	8 1/8
10	5/8	4 1/2	8 1/4
11	11/16	4 1/2	8 3/8
12	3/4	4 1/2	8 1/2
13	13/16	4 1/2	8 5/8
14	7/8	4 1/2	8 3/4
15	15/16	4 1/2	8 7/8
16	1	4 1/2	9

The Smoothbor Bit will carry itself into wood, cut a clean hole, finishing the hole neatly on the far side and turn easily without pressure on the brace. Auger Bit No. 62-TS has a fine pitch of thread in the screw for extra smooth boring. These bits are also obtainable with a fast screw and a medium screw. The spur is not too long or thick like a wedge. Its length is suited to the feed of the bit, with sufficient metal for strength brought to a cutting edge, but without unnecessary thickness which wedges and drags. The cutting lips have ample material to assure long life.

The throat of an auger bit is important. There must be plenty of room for the chips to leave the cutting lips. The twist receives the chips from the throat and conveys them to the mouth of the hole. Ample room in the twist keeps the chips moving freely. The outside of the twist of a bit is ground so that the diameter of the twist is slightly less than the diameter of the head, in order to permit the twist to follow the head into the hole without friction.

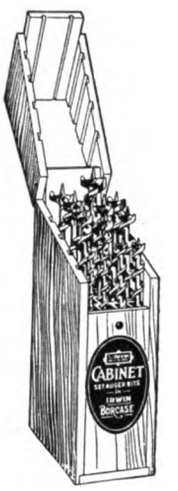
The shank of an Irwin Auger Bit is so manufactured as to have all four sides of exactly the same bevel, so that the bit will have no tendency to swing off center.

Cabinet Set 13 Bits in Borcase

The school set that is most popular is the Cabinet Set consisting of thirteen bits in Borcase —Stock No. DS. This kit consists of Irwin Smoothbor Auger Bits 62-TS in sizes 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, and 16/16ths.

There are a number of other Borcase sets that contain for instance only ten bits incorporating sizes 4, 5, 6, 7, 8, 10, 12, 14, and 16/16ths; another set that contains only six bits incorporating sizes 4, 6, 8, 10, 12, and 16/16ths.

Sizes 4 to 16/16ths inclusive, are packed six in a box. They can also be ordered in this manner.



Dowel-Bit No. 61-T

Dowel Bit No. 61-T is especially recommended for boring short, accurate holes such as dowel pin holes and similar work.

LENGTH—4½" over all.

CUTTING HEAD — Smoothbor (see drawing).

The screw of Dowel Bit No. 61-T has a fine pitch of thread for extra smooth boring. The body of the bit is the same as that of No. 62-TS previously described, possessing all its features and advantages. However, its length is only 4½ in. over all.

Specifications

Sizes in 16th of an inch	Sizes in Fractions of an Inch	Average Length of Twist in Inches	Average Length Over all in Inches
3	3/16	3	4 1/2
4	1/4	3	4 1/2
5	5/16	3	4 1/2
6	3/8	3	4 1/2
7	7/16	3	4 1/2
8	1/2	3	4 1/2
9	9/16	3	4 1/2
10	5/8	3	4 1/2
12	3/4	3	4 1/2
14	7/8	3	4 1/2
16	1	3	4 1/2
20	1 1/4	3	4 1/2

Manual training instructors will find this illustrated 48-page booklet a real help in promoting class interest and an appreciation of good tools.

There are detailed illustrations showing how bits are forged and machined, the parts of a bit and their functions, how to sharpen a bit properly, how to re-straighten the twist and how the design of the cutting head is varied to meet the requirements of the different classes of work.

A wealth of interesting and authoritative data based on 41 years of experience in the bit making industry.

Sample copies sent free of charge.